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FIG. 2

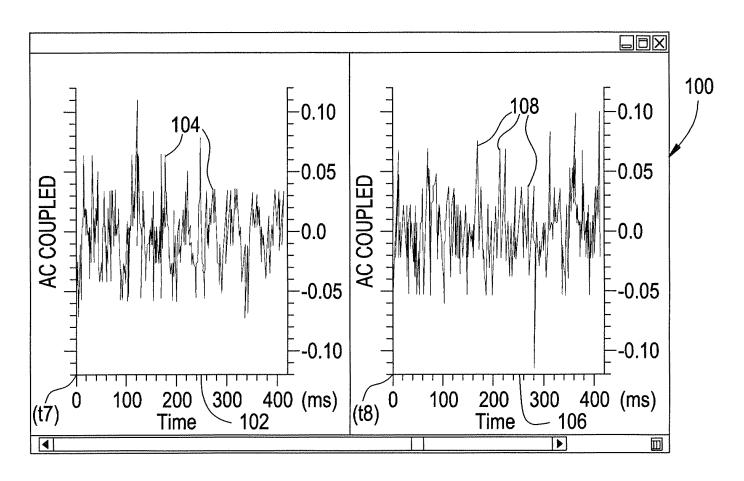


FIG. 3

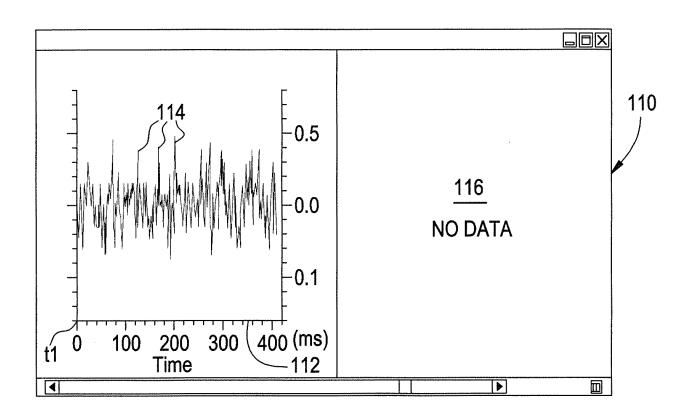
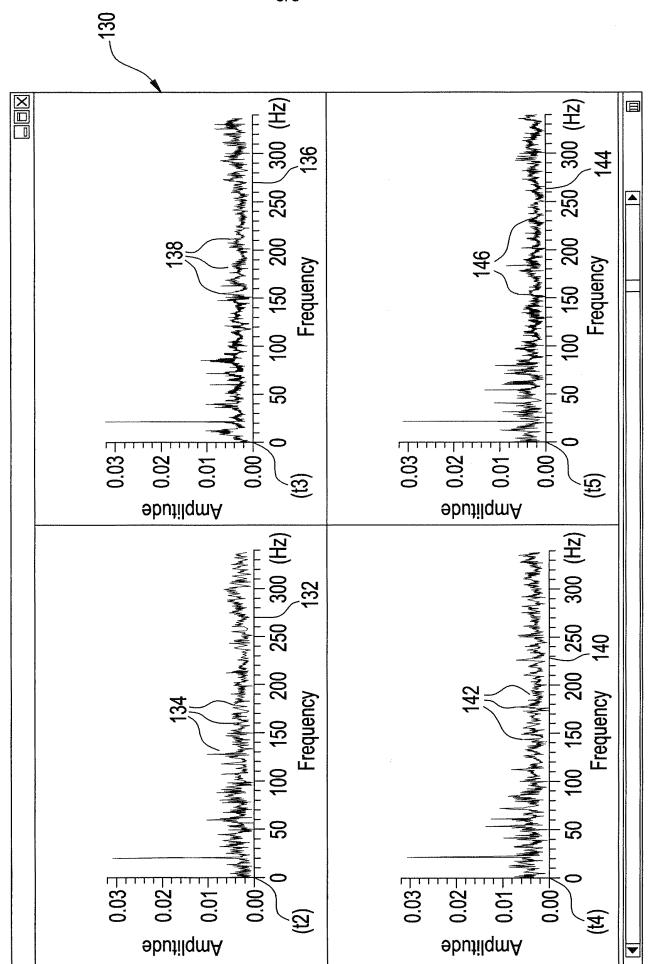


FIG. 4



160 168 Cancel sec 162 166 Time tolerance for matching samples

FIG. 5

178

User of a client computer inputs (i) a Segment ID "1" corresponding to a first sensor, (ii) a Segment ID "2" corresponding to a second sensor, (iii) a Segment ID "3" corresponding to a third sensor, (iv) a Segment ID "4" corresponding to a fourth sensor, (v) a start date and time, (vi) an end date and time

180

Client computer sends a first data request message to a database computer server including: (i) a Segment ID "1" associated with a first sensor, (ii) a start date and time, and (iii) an end date and time

182

Database computer server receives the first data request message and retrieves from a non-volatile memory a first list of time stamp values (t1, t2), wherein each time stamp value corresponds to a date and time when sampling was initiated to obtain a plurality of data sample values from a first sensor signal, wherein each time stamp value falls within the time interval defined between the (i) start date and time, and (ii) the end date and time

184

Database computer server sends a first data return message to the client computer containing the Segment ID "1" and the first list of time stamp values (t1, t2)

186

Client computer receives the first data return message and stores the Segment ID "1" and the first list of time stamp values in volatile memory

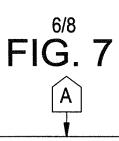
188

Client computer sends a second data request message to a database computer server including: (i) a Segment ID "2" associated with a second sensor, (ii) a start date and time, and (iii) an end date and time

-190

Database computer server receives the second data request message and retrieves from a non-volatile memory a second list of time stamp values (t3, t6, t7, t10), wherein each time stamp value corresponds to a date and time when sampling was initiated to obtain a plurality of data sample values from a second sensor signal, wherein each time stamp value falls within the time interval defined between the (i) start date and time, and (ii) the end date and time





192

Data base computer server sends a second data return message to the client computer containing the Segment ID "2" and the second list of time stamp values (t3, t6, t7, t10)

194

Client computer receives the second data return message and stores the Segment ID "2" and the second list of time stamp values in volatile memory

196

Client computer sends a third data request message to a database computer server including: (i) a Segment ID "3" associated with a second sensor, (ii) a start date and time, and (iii) an end date and time

-198

Database computer server receives the third data request message and retrieves from a non-volatile memory a third list of time stamp values (t4, t8), wherein each time stamp value corresponds to a date and time when sampling was initiated to obtain a plurality of data sample values from a third sensor signal, wherein each time stamp value falls within the time interval defined between the (i) start date and time, and (ii) the end date and time

200

Database computer server sends a third data return message to the client computer containing the Segment ID "3" and the third list of time stamp values (t4, t8)

202

Client computer receives the third data return message and stores the Segment ID "3" and the third list of time stamp values in volatile memory

204

Client computer sends a fourth data request message to a database computer server including: (i) a Segment ID "4" associated with a second sensor, (ii) a start date and time, and (iii) an end date and time

206-

Database computer server receives the fourth data request message and retrieves from a non-volatile memory a second list of time stamp values (t5, t9), wherein each time stamp value corresponds to a date and time when sampling was initiated to obtain a plurality of data sample values from a fourth sensor signal, wherein each time stamp value falls within the time interval defined between the (i) start date and time, and (ii) the end date and time

208-

Data base computer server sends a fourth data return message to the client computer containing the Segment ID "4" and the fourth list of time stamp values (t5, t9)

210

Client computer receives the fourth data return message and stores the Segment ID "4" and the fourth list of time stamp values in volatile memory

212-

Client computer generates an array using the first, second, third, and fourth lists of time stamp values wherein the array arranges the Segment IDs and associated time stamp values in time sequence order

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1		***************************************								
	S1, t1	S1, t2	S2, t3	S3, t4	S4, t5	S2, t6	S2, t7	S3, t8	S4, t9	S2, t10
1	,	,	,	,	1 '	,		1 ′		' '

216-

Client computer generates a table having a plurality of records utilizing the array, each record assigned to a page on a computer screen, wherein each record has (i) at least one Segment ID and a corresponding time stamp value, and (ii) any other Segment IDs having other time stamp values wherein the difference between the corresponding time stamp value and the each other time stamp value is less than a time threshold vaule

Page 1	S1, t1			
Page 2	S1,t2	S2, t3	S3, t4	S4, t5
Page 3	S2, t6			
Page 4	S2, t7	S3, t8		
Page 5	S4, t9	S2, t10		

C

## FIG. 9

